PLEISTOCENE PECCARY *PLATYGONUS COMPRESSUS* LECONTE FROM SANDUSKY COUNTY, OHIO

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A collection of mammalian bones was made by Charles Innis and Thornton Hole from a sand deposit about five miles west of Fremont, SW¼ sec. 27, T 5 N, R 14 E, Washington Township, Sandusky County, Ohio. This collection was brought to the attention of the Department of Geology at Bowling Green State University for identification and restoration.

Parts of at least four individual peccaries are present in the collection. The bones, for the most part, are in an excellent state of preservation and were partially articulated. At least one of the individuals was immature with the ends of the leg bones and the epiphyses of the vertebrae not fused. A restoration of a mature female was possible. A few milk teeth of a very immature specimen of *Equus* sp., identified by C. W. Hibbard of the Museum of Paleontology at the University of Michigan, were found associated with the peccary bones and are listed in table 8.

In his discussion of the Pleistocene of North America, Hay (1923) mentions four previous finds of peccary in Ohio. Three of these were described as *Platygonus compressus* and came from near Wilmington, Clinton County; Columbus, Franklin County; and near Chalfants, in Perry County. *Mylonyus nasutus* Leidy was reported near Lisbon in Columbiana County although the identification is reported to be questionable. Two specimens of *P. compressus* were discovered in Cincinnati, Hamilton County, which may be pre-Wisconsin in age (K. E. Castor, personal communication).

J. L. Forsyth (personal communication) has kindly provided information concerning five other peccary finds in Ohio. These include three peccary skulls found in 1909 in Cleveland, Cuyahoga County, which are in the Cleveland Museum of Natural History; a peccary find of unknown character found in 1838 near Columbus, Franklin County; a questionable peccary skull found in 1905 four miles

northwest of Circleville, Pickaway County; a peccary find of unknown character found in 1898 at Chillicothe, Ross County; and a peccary find of unknown character found one mile north of Courtland, Trumbull County, which is now in the Cleveland Museum of Natural History.

STRATIGRAPHY

The specimens were found about 15 ft below the top of a sand hill. The sand here forms a high, narrow ridge, which is at an altitude of approximately 680 ft. Thus, it is, both by altitude and location, considered to be a part of the Lake Warren beach ridge. In this area, the Warren beach consists of a number of isolated hills or ridges, and does not present the strong linear ridge known elsewhere. The ridge at this point is probably a dune deposit, at least in part. Forsyth (1959) gives an age of 9,640+ years for the Lake Warren beach ridge.

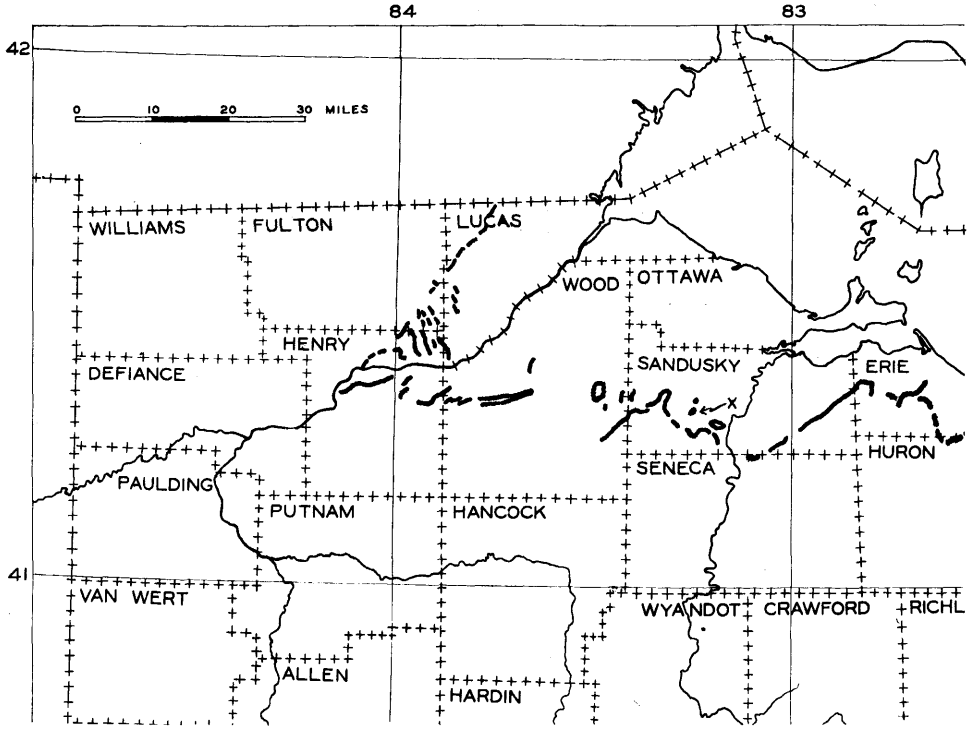
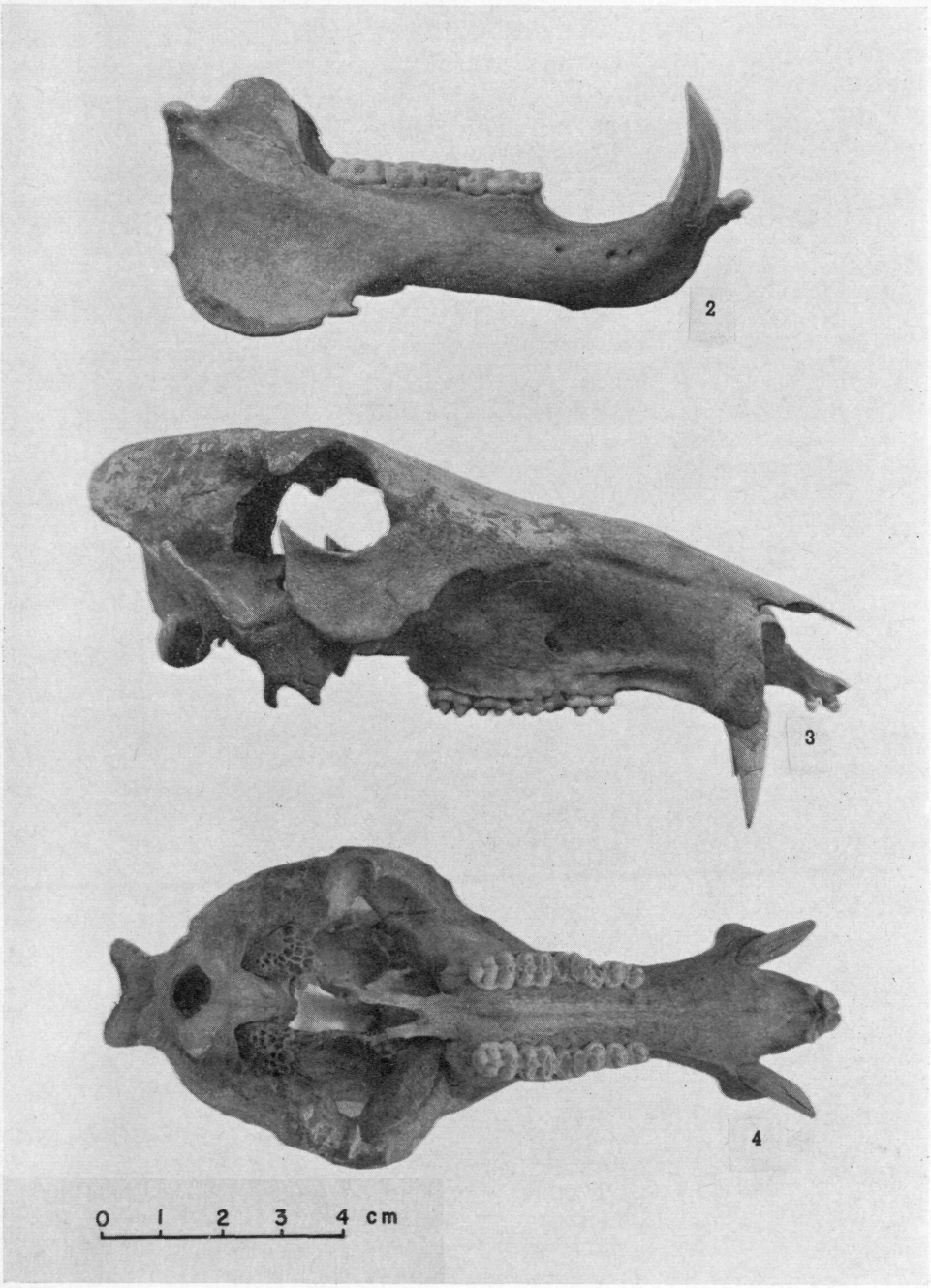


FIGURE 1. Map of counties in northwestern Ohio showing generalized location of Lake Warren beach ridge (after Forsyth, 1959) and collecting locality.

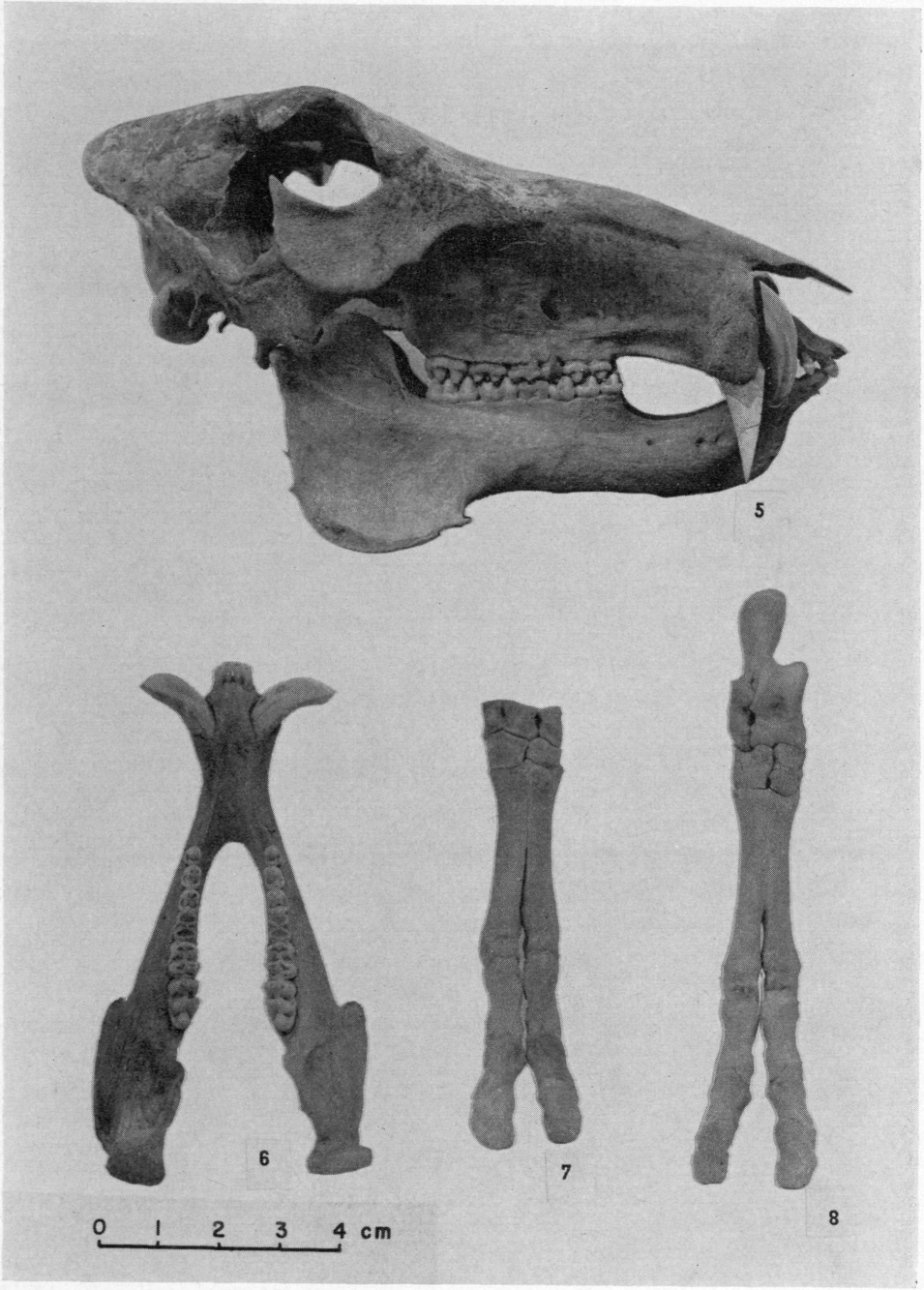
SYSTEMATIC DESCRIPTION

Order Artiodactyla Owen, 1848
Family Tayassuidae Palmer, 1897
Genus *Platygonus* LeConte, 1848
Platygonus compressus LeConte
Pls. 1–3, figs. 2–9

Platigonus compressus LeConte, 1848, Am. J. Sci., ser. 2, 5: 103. [*lapsus calami*].
Platygonus compressus Simpson, 1949, Am. Mus. Nat. Hist. Novitates 1408: 21–44, fig. 6–16. (See for additional synonymy up to this date.)
Platygonus compressus Mehl, 1962, Missouri Geol. Surv. and Water Resources, Edu. Ser. 1: 65, fig. 38, 39a.



All figures magnified×.42
Platygonus compressus LeConte.
FIGURE 2. Lateral view of mandible.
FIGURES 3, 4. Lateral and ventral views of skull.

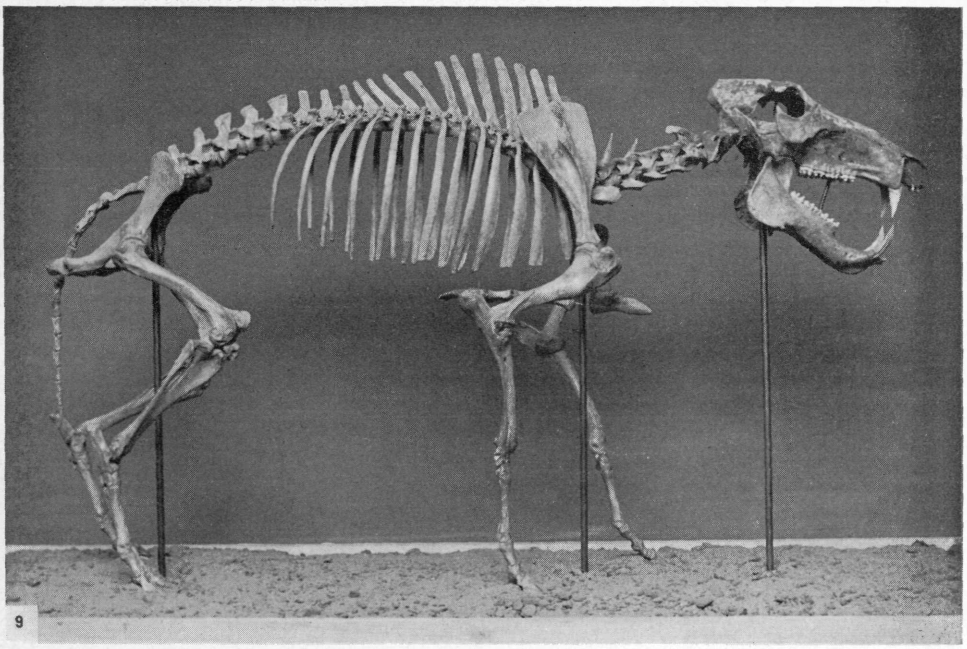


All figures magnified×.42
Platygonus compressus LeConte.

FIGURE 5. Lateral view of articulated skull and mandible.
FIGURE 6. Dorsal view of mandible.
FIGURE 7. Anterior view of right front foot.
FIGURE 8. Anterior view of right hind foot.

A reconstruction was made of a mature female which is shown in figure 9. The measurements presented in tables 1–7 were made from this specimen and are measurements of maximum distance. The partial skull of a mature female and its associated mandible were used in the reconstruction and the measurements given in tables 1–4 are based only upon it. The measurements of the skull fall within or close to the degree of variation as described by Simpson (1949) for specimens of *P. compressus* from a Pleistocene cave deposit in St. Louis, Missouri.

The top and left side of the cranium was missing and had to be reconstructed. The teeth are all present and in place. They are somewhat worn and one premolar has a piece broken off. The enamel of the canines is partially split which apparently occurred after death.



Magnified approx. ×.10
Platygonus compressus LeConte.
FIGURE 9. Right lateral view of restored specimen

The rest of the assembled skeleton, although possibly not belonging to this skull, was measured and the data presented in tables 5–7. The vertebral column consists of an atlas, axis, seven cervical, fourteen dorsal, five lumbar vertebrae, a fused sacrum, and at least fourteen caudal vertebrae. Although some of the caudal vertebrae may be missing, it is thought to be complete. A number of the processes on the vertebrae were partially or completely missing and were rebuilt.

A complete sternum of six segments is present. The scapulas were partially broken and rebuilt. The pelvis is complete. All of the limbs are complete with the exception of one small carpal on the left front foot. The ulna is completely fused with the radius in the mounted specimen and the other mature individuals in the deposit. They are not fused in the youthful specimen. The rib cage is composed of fourteen pairs of ribs, some of which are complete, but most of which needed partial rebuilding. A listing of all material collected is given in table 8. The bones of the immature specimen are easily distinguished from the material of

older individuals. The numbers of various bones present, such as the sacra and the innominate bones, point out the presence of at least four individual peccaries.

Repository—All specimens are in the collection of the Department of Geology, Bowling Green State University. Reconstruction, BGSU 2353; immature individual, BGSU 2354; composite of rest of peccary find, BGSU 2355; *Equus* sp., BGSU 2356.

TABLE 1

Measurements (in millimeters) of skull of Platygonus compressus

Extreme length of skull	302
Total basal length measured from condylar notch	268
Posterior border of the orbit to posterior border of the inion	77
Anteroposterior diameter of orbit	38*
Anterior border of orbit to extreme end of premaxillary	195
Depth of skull at the condyles	95
Depth of skull at glenoid fossa	88
Greatest breadth of the zygomatic expansion below orbit	35
Greatest width of skull across zygomae	136
Width of face at middle of orbits	91*
Width of face at postorbital processes	100*
Width of face above infraorbital foramen	46
Width of palate between canines	42
Width of palate just anterior to P^2	36
Width of palate between second premolars	31
Width of palate between second molars	25
Distance across first pair of molars	52
Length of diastema between C and I^2	22
Length of diastema behind canine	42

*Approximate measurement.

TABLE 2

Measurements (in millimeters) of the superior dentition of Platygonus compressus

Total length of upper dental series, I^1–M^3	165.0
Length of upper cheek tooth series, P^2–M^3	75.0
Length of upper premolar series, P^2–P^4	30.0
I^1, anteroposterior diameter	6.8
I^1, transverse diameter	8.6
I^2, anteroposterior diameter	5.1
I^2, transverse diameter	5.3
C, anteroposterior diameter	20.0
C, transverse diameter	11.0
P^2, anteroposterior diameter	9.8
P^2, transverse diameter	9.8
P^3, anteroposterior diameter	10.8
P^3, transverse diameter	10.8
P^4, anteroposterior diameter	9.7
P^4, transverse diameter	12.2
M^1, anteroposterior diameter	12.9
M^1, transverse diameter	12.6
M^2, anteroposterior diameter	15.6
M^2, transverse diameter	14.9
M^3, anteroposterior diameter	18.5
M^3, transverse diameter	15.5

TABLE 3

Measurements (in millimeters) of the mandible of Platygonus compressus

Total length of lower jaw, condyle to tip of incisors	216.5
Depth of lower jaw at M^1	44.6
Depth of jaw at coronoid process	94.0
Depth of lower jaw at condyle	85.0
Internal width between the alveoli of lower canines	14.6
Length of symphysis in front (in straight line)	77.0
Length of diastema between I_2 and C	6.4
Length of diastema behind canine (straight line)	50.5

TABLE 4

Measurements (in millimeters) of the inferior dentition of Platygonus compressus

Total length of lower dental series, I_1–M_3	163.0
Length of lower cheek tooth series, P_2–M_3	78.7
Length of lower premolar series, P_2–P_4	29.4
I_1, anteroposterior diameter	5.2
I_1, transverse diameter	5.0
I_2, anteroposterior diameter	4.7
I_2, transverse diameter	5.0
C, anteroposterior diameter	15.1*
C, transverse diameter	11.6
P_2, anteroposterior diameter	8.8
P_2, transverse diameter	7.5
P_3, anteroposterior diameter	10.7
P_3, transverse diameter	8.4
P_4, anteroposterior diameter	10.4
P_4, transverse diameter	9.2
M_1, anteroposterior diameter	12.9
M_1, transverse diameter	9.9
M_2, anteroposterior diameter	15.7
M_2, transverse diameter	12.0
M_3, anteroposterior diameter	21.2
M_3, transverse diameter	12.1

*Approximate measurement.

TABLE 5

Measurements (in millimeters) of vertebrae of Platygonus compressus

Length of vertebral column from atlas to distal end of sacrum	859
Length of cervical series of vertebrae	192
Length of dorsal series of vertebrae	385
Length of lumbar series of vertebrae	174
Length of fused sacrum	108
Greatest width of atlas	105
Width of condylar facets of atlas	54
Length of axis, exclusive of odontoid process	40
Height of spine of first dorsal	105*
Height of spine of third dorsal	97
Height of spine of second lumbar	27
Height of spine of last lumbar	24
Length of 14 caudal vertebrae	330

*Approximate measurement.

TABLE 6

Measurements (in millimeters) of anterior limb of Platygonus compressus

Length of scapula	206
Greatest width of blade of scapula	107*
Greatest width of articular face	29
Height of spine of scapula	27*
Length of humerus	200
Width of proximal face of humerus	37
Anteroposterior diameter of shaft just below deltoid tubercle	36
Greatest length of ulna	213
Greatest length of radius	167
Transverse diameter of sigmoid fossa	31
Transverse diameter of distal face of radius	28
Least width of conjoined bones	26
Transverse diameter of carpus	35
Length of carpus, inside	28
Length of carpus, outside	32
Width of proximal end of metacarpals III and IV	33
Length of metacarpal III, inner side	85
Least transverse width of metacarpals III and IV	23
Length of three phalanges of digit III	86

*Approximate measurement.

TABLE 7

Measurements (in millimeters) of posterior limb of Platygonus compressus

Greatest length of innominate bone	265
Center of acetabulum to anterior border of ilium	131
Center of acetabulum to posterior border of ischium	127
Diameter of acetabulum	33
Length of pubic symphysis	82
Longest diameter of obturator foramen	43
Greatest length of femur	200
Anteroposterior diameter of head of femur	29
Transverse diameter of head of femur	31
Transverse diameter of condyles of femur	45
Transverse diameter of trochlea of femur	22
Length of tibia, inner side	195
Width of proximal end of tibia	48
Width of distal end of tibia	33
Width of proximal end of astragalus	22
Greatest length of astragalus	38
Greatest length of calcaneum	74
Total length of tarsus	57
Width of proximal end of metatarsals	29
Width of distal end of metatarsals	32
Length of metatarsals, inner side	89
Least width of fused metatarsals	21
Total length of three phalanges of digit III	83

TABLE 8

Composite list of all material found

Platygonus compressus	
2 skulls (both partial)	14 metatarsals
2 atlases	27 posterior phalangeal bones
2 axes	8 innominate bones
18 cervical vertebrae	5 patellae
41 dorsal vertebrae	8 humeri
18 lumbar vertebrae	6 radii
4 sacra	6 ulnae
16 caudal vertebrae	21 carpals
6 scapulae	8 metacarpals
8 femurs	26 anterior phalangeal bones
7 fibulae	20 sternal parts
7 tibiae	74 ribs
39 tarsals	39 epiphyses
Equus sp.	
1 corner incisor	
1 superior molar	
4 inferior molars	
1 fragment of mandible	

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